

ABSTRACT OF THE DISCLOSURE

The following method is used to measure the adhesion of a polymer binder to a
5 heated metal surface:

A metal plate is attached to a heated (350 °F; 177 °C) platform and allowed to
equilibrate to the temperature of the platform. A polymer emulsion binder is applied to a
substrate, such as cotton fabric, and an end of the coated substrate is attached to a
tensile measuring apparatus. The coated side of the coated substrate is pressed onto
10 the heated metal plate; e.g., using a 3-lb lab roller. After a length of time to cause drying
and/or partial cure of the binder (approximately 30 seconds), the metal plate and the
tensile measuring device are separated at a given uniform speed. The amount of force
needed to remove the substrate from the metal plate is recorded.